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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,175	09/10/2001	Richard B Ward	36-1485	9578

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EXAMINER

NGUYEN BA, HOANG VU A

ART UNIT

PAPER NUMBER

2122

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/936,175	Applicant(s) WARD ET AL.	
	Examiner Hoang-Vu A Nguyen-Ba	Art Unit 2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/5/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application and to the preliminary amendment both filed September 10, 2001. The priority date is that of the UK Application 9907438.7, filed March 31, 1999.
2. Per Applicants' request, claims 3-5 and 8-10 have been amended. Claims 1-12 are pending and have been examined.

Information Disclosure Statement

3. The examiner acknowledges receipt of the Information Disclosure Statement filed February 5, 2002. However, a copy of the reference titled "Design for Testability in Object-Oriented Systems" and listed on PTO-1449 Form is not available. Therefore, the reference has not been considered.

Drawings

4. The drawings are objected to because it is unclear which Figure(s) the two flowcharts of Figure 3 connect to via C and D connectors and where connectors A and B are?

Correction is required.

Specification

5. The title of the invention is not descriptive because it fails to point out distinctly the subject matter which Applicants regard as the invention. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: – Method and Apparatus for Automated Software Unit Testing –.

Claim Objections

6. Claim 8 is objected to because of the following typographical error: "A method according to claim 6" should be changed to – An apparatus according to claim 6 – to give proper dependency to claim 8.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 11 and 12 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. In *Ex parte Lyell*, 17 USPQ 2d 1548 (Bd. Pat. App. & Inter. 1990), a claim directed to an automatic transmission workstand and the method steps of using it was held to be ambiguous and properly rejected under 35 U.S.C. 112, second paragraph.

In claim 11, it is unclear whether a product or a process of testing an operational integrated software system is claimed. With a product (e.g., a data carrier) recited in the preamble, one would expect to find in the body of the claim components having functions to test a software system. However, one only found method steps for testing an operational integrated software system as claimed in claim 1.

The same rationale for rejection of 11 also applies to claim 12, which recites "a data carrier ... carrying instructions for enabling the computer to provide the apparatus according to claim 6."

10. Furthermore, claim 12 recites "instructions for enabling the computer to provide the apparatus according to claim 6." The claim language is vague and indefinite because it is unclear how can instructions provide an apparatus.

Correction is required.

Claim Rejections – 35 USC § 101

11. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claims 11 and 12 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

A single claim which claims both a product and the method steps of using the product should also be rejected under 35 U.S.C. 101, *Ex parte Lyell*, 17 USPQ 2d 1548 (Bd. Pat. App. & Inter. 1990), based on the theory that the claim is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Id.* at 1551.

13. Claims 1-12 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

14. Claims 6-12 are not limited to "a practical application of an abstract idea which produced a useful, concrete, and tangible result." State Street Bank &

Trust v. Signature Financial Group, Inc., 149 F. 3d 1368, 1375 n. 9 (Fed. Cir. 1998).

Specifically, claims 6, 11 and 12 are directed to an apparatus and data carrier carrying instructions for testing an operational integrated software system. This system comprises software components, e.g., software program per se. Applicants thus fail to disclose that these software components are tangibly embodied and executed by a piece of hardware and that their functions have practical applications which produce useful, concrete, and tangible results under the State Street Formulation.

On this basis, claims 6, 11 and 12 are rejected under 35 U.S.C. § 101.

Claims 7-10, which depend from claim 6, are therefore rejected for the same reasons.

Claim Rejections – 35 U.S.C. § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent,

except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

16. Claims 1-12 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,002,869 to Hinckley.

Claims 1 and 6

Hinckley discloses at least:

- a) automatically registering each active element of software in a registry (see at least 7:6-58);*
- b) associating a set of test criteria with each registered element of software (see at least 7:59-8:18);*
- c) selecting an element registered in the registry and testing the element in accordance with the associated set of test criteria (see at least Figure 3, step 310 and related discussion in the specification); and*
- d) capturing the results of the testing of the element and comparing them to the associated test criteria (see at least 8:27-41).*

Claims 2 and 7

The rejection of base claims 1 and 6 is incorporated. Hinckley further discloses *each element of software is arranged to automatically register an identification of itself in the registry (see at least 7:6-58).*

Claims 3 and 8

The rejection of base claims 1 and 6 is incorporated. Hinckley further discloses *each element of software is arranged to capture the results of its testing (see at least Figures 2 and 8, block 210 and related discussion in the specification; 8:27-41).*

Claims 4 and 9

The rejection of base claims 1 and 6 is incorporated. Hinckley further discloses *automatically providing a report on the results of the testing* (see at least Figures 2 and 8, block 210 and related discussion in the specification; 8:27-41).

Claims 5 and 10

The rejection of base claims 1 and 6 is incorporated. Hinckley further discloses *the test criteria are defined using a scripting language and said method further comprises the step of parsing the test criteria to convert them into a form for testing against* (see at least Figure 2, block 204; Figure 3, block 308; Figure 5; Figure 8, blocks 804, 806; and related discussion in the specification).

Claim 11

Claim 11 recites a data carrier loadable into a computer and carrying instructions for causing the computer to carry out the same method steps of claim 1. Therefore, the same rejection is applied.

Claim 12

Claim 12 recites a data carrier loadable into a computer and carrying instructions for enabling the computer to provide the same apparatus of claim 11 which perform the same method steps of claim 1. Therefore, the same rejection is applied.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (703) 305-0103. The examiner can normally be reached on Tuesday-Friday, 6:00 to 16:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANTONY NGUYEN-BA
PRIMARY EXAMINER

Art Unit 2122

July 7, 2004